

Claims;

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1. A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized in that the workpiece-transfer device includes a movement means with a rectangular coordinate system for moving a traveling body in a first direction along the direction in which the workpiece-machining device and a workpiece-storage device stand in a line as well as in a second horizontal direction or thogonal to the first direction, and in that said traveling body includes a gripping means for gripping a material or product workpiece.

2. A workpiece-transfer device as in Claim 1, characterized in that said workpiece-storage device comprises a product-housing section and a material-housing section provided in parallel in said second direction, and in that the arrangement of the product and material-housing sections is set so as not to exceed the arrangement range of said workpiece-machining device along the second direction.

3. A workpiece-transfer device as in Claim 1 or Claim 2, characterized in that said workpiece-storage device comprises a product-housing section and a material-housing section, in that said rectangular coordinate system movement means can move said traveling body to said product and material-housing sections so that said traveling body can be moved to position and load a material workpiece gripped by the gripping means of said traveling body, relative to a

positioning member of said workpiece-machining device.

4. A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized by comprising one workpiece-gripping means.

5. A workpiece-transfer device as in Claim 4, characterized in that said workpiece-gripping means is provided on a traveling body that travels between the workpiece-machining device and a workpiece-storage device capable of storing material and product workpieces.

6. A workpiece-transfer device as in Claim 4 or Claim 5, characterized in that said workpiece-gripping means comprises a plurality of suction pads.

7. A workpiece-transfer device as in Claim 6, characterized in that said product workpiece is a small workpiece partially cut off from a material workpiece by the workpiece-machining device, in that said workpiece-gripping means uses a large number of suction pads to load a material workpiece in the workpiece-machining device, while using fewer suction pads than that used in the loading of the material workpiece to unload a product workpiece from the workpiece-machining device.

8. A workpiece-transfer device as in Claim 7, characterized in that a small number of suction pads closer to the workpiece-machining device are used to unload a product workpiece.

9. A workpiece-transfer device as in Claim 6, characterized in that some of

the plurality of suction pads each comprise a group of small pads, and in that a constriction is provided for a suction path for the individual small pad.

10. A workpiece-transfer device as in Claim 9, characterized in that the suction pads comprising a group of small pads are placed closer to the workpiece-machining device.

11. A workpiece-transfer device as in Claim 10, characterized in that the suction pads placed closer to the workpiece-machining device and comprising a group of small pads are first selected in unloading a product workpiece.

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